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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,657	03/09/2004	Christine C. Dykstra	421/60/18/2/2	2624

25297 7590 12/28/2005

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EXAMINER	
GRAZIER, NYEEMAH	
ART UNIT	**PAPER NUMBER**
1626	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/796,657	DYKSTRA ET AL.	
	Examiner	Art Unit	
	Nyeemah Grazier	1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-113* is/are pending in the application.

4a) Of the above claim(s) *3,8-10 and 26-113* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4,11,14,15,18,19,22 and 23* is/are rejected.

7)☒ Claim(s) *2, 4, -7, 11-13, 15-17, 19-21, 23-25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/17/05, 6/24/04*.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION
FIRST ACTION ON THE MERITS

I. ACTION SUMMARY

Claims 1-113 are currently pending. Group I: Claims 1, 2, 4-7, 11-13 (in-part), Group III: claims 14-21 (in-part) and Group IV: claims 22-25 (in-part) have been rejoined with Group II claims 14-17. Claims 3, 8-10, and 26-113 are withdrawn from further consideration by the Examiner because Claims 3, 8-10, and 26-113 are drawn to a non-elected invention. 37 C.F.R. § 1.142(b).

II. PRIORITY

Applicant claims priority to US Non-Provisional Application Serial Number 10/044,315 filed on January 11, 2002 (now abandoned) which claims benefit to US Provisional Application 60/261654, filed January 13, 2001.

III. INFORMATION DISCLOSURE STATEMENT

The information disclosure statements (IDS) submitted on October 17, 2005 and June 24, 2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements have been considered by the examiner.

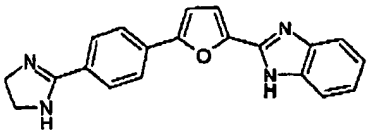
IV. RESTRICTION/ELECTION

A. Election: Applicant's Response

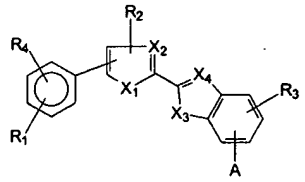
Applicant's election of Group II, claims 14-17 in the Response filed on October 27, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

B. Status of the Claims

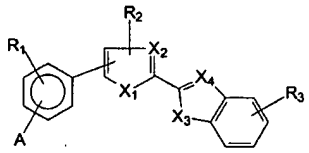
i. Scope of the Elected Subject Matter



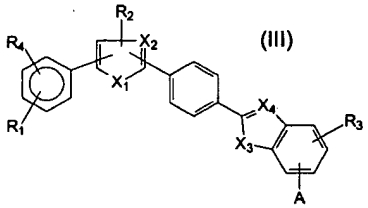
Applicant has provisionally elected the above specie of the invention for search purposes. The scope of the elected invention is therefore the compounds of Formula I-IV (see below) of claims 1, 2, 4-7, and 11-25:



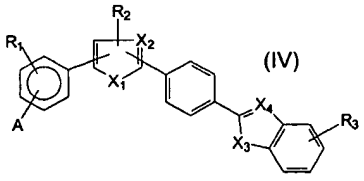
(I)



(II)



(III)



(IV)

Wherein:

"**A**" is imidazole, "$\mathbf{X_1}$" is oxygen, "$\mathbf{X_2}$" is CH, "$\mathbf{X_3}$" is NH and "$\mathbf{X_4}$" is nitrogen. Variables $\mathbf{R_1}$, $\mathbf{R_2}$ and $\mathbf{R_3}$ and $\mathbf{R_4}$ are independently selected from the group consisting of H, alkyl, alkoxy, halide, alkylhalide, amidine, nitro and amino groups.

ii. Non-elected Subject Matter Withdrawn 37 C.F.R. §1.142(b)

The subject matter of claims 1, 2, 4-7, 11-25 (in-part) and the whole of claims 3, 8-10 that will not be examined nor considered for examination purposes are the compounds of Formulae I-IV wherein:

"**A**" is selected from the group consisting of H, alkyl, aryl, CNHNHR6, NHCNHNHR6 and 1,3-diazine as shown in instant claim 1;

"$\mathbf{X_1}$" and "$\mathbf{X_3}$" are independently selected from the group consisting of O, S, and NR9 wherein R9 is H or alkyl, and "$\mathbf{X_2}$" and "$\mathbf{X_4}$" are each independently CH or nitrogen; **EXCEPT** (as previously mentioned) where "$\mathbf{X_1}$" is oxygen and "$\mathbf{X_2}$" is CH, and "$\mathbf{X_3}$" is NH and "$\mathbf{X_4}$" is nitrogen;

Variables $\mathbf{R_1}$, $\mathbf{R_2}$ and $\mathbf{R_3}$, $\mathbf{R_4}$ **and** $\mathbf{R_5}$ are independently selected from the group consisting of H, alkyl, alkoxy, halide, alkylhalide, amidine, nitro and amino groups;

$\mathbf{R_6}$ is H, alkyl, or aryl; and $\mathbf{R_7}$ and $\mathbf{R_8}$ are each independently selected from the group consisting of H and alkyl.

V. REJECTION(S)

35 U.S.C. § 101, STATUTORY BASIS FOR DOUBLE PATENTING

Instant Claims 107-113 are rejected as provisional double patent rejection. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefore" (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type 35 U.S.C. § 101 double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Provisional Rejection, 35 U.S.C. § 101, Double Patenting

Should the method claims be rejoined the following rejection would be made: Claims 107-113 are provisionally rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 107-113 of copending Application No. 11/262,427. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

First, both the instant application and the Application Number 11/262,427 both claim the same subject matter; namely, benzimidazole-substituted furans and aryl furans for the treatment of bovine viral diarrhea virus infection and hepatitis C virus. The subject matter of copending application and the instant application are identical. Furthermore, the claims (107-113) recited in

the instant application are identical to the claims in the copending application. Therefore the subject matter claimed in the instant application is fully disclosed in the copending application.

OBVIOUSNESS-TYPE DOUBLE PATENTING

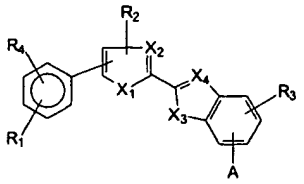
Claims 1, 2, 4, 11, 14, and 15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 3 of *Wilson et al.* (US 6,613,787B2) herein referred to as "the '787 patent) and claims 1 and 4 of *Wilson et al.* (US 6,867,227B2) herein referred to as "the '227 patent."

A rejection based on nonstatutory double patenting is based on a judicially created doctrine grounded in public policy so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re* Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re* Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re* Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re* Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re* Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969). See also M.P.E.P. § 804 (2001).

Obvious-type nonstatutory double patenting rejection is "analogous to [a failure to meet] the nonobviousness requirement of 35 U.S.C. §103" with the distinction that the double patent rejection is not considered prior art. Id. See also In re Braithwaite, 379 F.2d 594, 154 USPQ 29 (CCPA 1967). Thus, the analysis employed in an obviousness-type double patent rejection is consistent with a §103(a) analysis set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966).

Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Instant Claim 1 recites a compound of Formula (I),



(I)

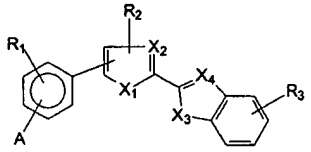
Wherein, *inter alia*: "**A**" is imidazole, "$\mathbf{X_1}$" is oxygen, "$\mathbf{X_2}$" is CH, "$\mathbf{X_3}$" is NH and "$\mathbf{X_4}$" is nitrogen. Variables $\mathbf{R_1}$, $\mathbf{R_2}$ and $\mathbf{R_3}$ and $\mathbf{R_4}$ are independently selected from the group consisting of H, alkyl, alkoxy, halide, alkylhalide, amidine, nitro and amino groups.

Instant Claim 2 recites the compound according to claim 1 wherein: "$\mathbf{X_1}$" is oxygen, "$\mathbf{X_2}$" is CH, "$\mathbf{X_3}$" is NH and "$\mathbf{X_4}$" is nitrogen and variables $\mathbf{R_2}$ and $\mathbf{R_3}$ and $\mathbf{R_4}$ are each hydrogen.

Instant Claim 4 recites the compound according to claim 1, wherein "**A**" is imidazole.

Instant Claim 11 recites the pharmaceutical composition of claim 1.

Instant Claim 14 recites a compound of Formula (I),



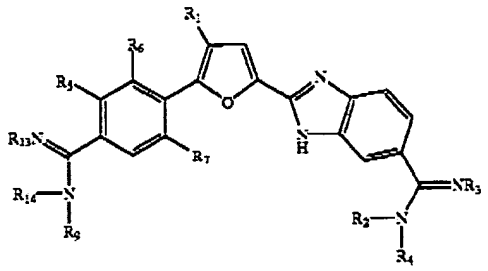
(II)

Wherein, *inter alia*: "**A**" is imidazole, "$\mathbf{X_1}$" is oxygen, "$\mathbf{X_2}$" is CH, "$\mathbf{X_3}$" is NH and "$\mathbf{X_4}$" is nitrogen. Variables $\mathbf{R_1}$, $\mathbf{R_2}$ and $\mathbf{R_3}$ and $\mathbf{R_4}$ are independently selected from the group consisting of H, alkyl, alkoxy, halide, alkylhalide, amidine, nitro and amino groups.

Instant Claim 15 recites a pharmaceutical composition according to claim 14.

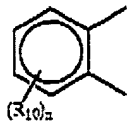
Determining the Scope and Contents of the Wilson et al. Patents

Conflicting Claims 1 and 3 of the '787 patent recite compounds and compositions of the compounds of Formula (I).



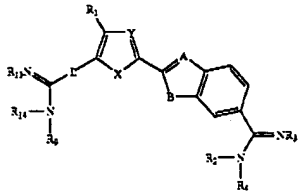
Claim 1 and 3 recites the compound and composition of formula (I) wherein:

R_1 is selected from the group consisting of H, lower alkyl, halogen, oxyalkyl, oxyaryl, and oxyarylalkl;
R_2 and R_6 are each independently selected from the group consisting of H, alkoxyalkyl, aryl, alkylaryl, hydroxyalkyl, and aminoalkyl; and
R_3, R_4, R_{13}, R_{14} and each independently selected from the group consisting of H, alkoxyalkyl, aryl, alkylaryl, hydroxyalkyl, and aminoalkyl; or
R_3 and R_4 together or R_{13} and R_{14} together represent a C_2 to C_{10} alkyl, hydroxyalkyl, or alkylene, or R_3 and R_4 together or R_{13} or R_{14} together are:



wherein n is a number from 1 to 3, and R_{10} is H or —$CONHR_{11}NR_{15}R_{16}$, wherein R_{11} is lower alkyl and R_{15} and R_{16} are each independently selected from the group consisting of H and lower alkyl; and
wherein R_2, R_6, R_7 and R_8 are each individually selected from the group consisting of H, alkyl, halo, aryl, arylalkyl, aminoalkyl, aminoaryl, oxoalkyl, oxoaryl, and oxoarylalkyl.

Conflicting Claims 1 and 4 of the '227 patent recite compounds and compositions of the compounds of Formula (I).



wherein:

X is selected from the group consisting of O and S;

Y is CH;

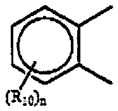
A is N;

B is selected from the group consisting of NH and O, provided that when X is O and A is N, B is not NH;

R_1 is selected from the group consisting of H, loweralkyl, halogen, oxyalkyl, oxyaryl, and oxyarylakyl;

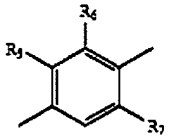
R_2 and R_9 are each independently selected from the group consisting of H, hydroxy, lower alkyl, cycloalkyl, aryl, alkylaryl, alkoxyalkyl, hydroxycycloalkyl, alkoxycycloalkoxy, hydroxyalkyl, aminoalkyl and alkylaminoalkyl; and

R_3, R_4, R_{13} and R_{14} are each independently selected from the group consisting of H, lower alkyl, alkoxyalkyl, cycloalkyl, aryl, alkylaryl, hydroxyalkyl, aminoalkyl, and alkylaminoalkyl, or R_3 and R_4 together or R_{13} and R_{14} together represent a C_2 to C_{10} alkyl, hydroxyalkyl, or alkylene, or R_3 and R_4 together or R_{13} and R_{14} together are:



wherein n is a number from 1 to 3, and R_{10} is H or —CONHR$_{11}$NR$_{15}$R$_{16}$, wherein R_{11} is lower alkyl and R_{15} and R_{16} are each independently selected from the group consisting of H and lower alkyl;

L is:



wherein R_5, R_6, R_7, and R_8 are each individually selected from the group consisting of H, alkyl, halo, aryl, arylalkyl, aminoalkyl, aminoaryl, oxoalkyl, oxoaryl, and oxoarylalkyl; and wherein said compound of Formula I binds the minor groove of DNA as a dimer.

Ascertaining the Differences Between the Wilson et al. Patents and the Instant Claims

The difference between the instant claims and *Wilson et al.* Patents is the scope of the inventions.

Resolving Level of Ordinary Skill in the Pertinent Art

The pertinent art is immunological drug discovery and generally medicinal chemistry. One of ordinary skill in the pertinent art of medicinal chemistry, specifically, immunological drug discovery would have the motivation to make and use to instant invention because there is motivation to make and use the instant compounds in the abovementioned co-pending application. The motivation to make claimed compound derives from the expectation that structurally similar compounds are generally expected to have similar properties and have similar utilities. In re Gyurik, 596 F. 2d 1012, 201 USPQ 552 (CCPA 1979).

Prima Facie Obviousness-The Rational and Motivation (MPEP §2142-2413)

The prima facie case for obviousness is derived from structural similarities. The teachings of the copending application would have motivated one skilled in the art to make and use in the instant compounds and compositions with the expectation that they would both have the same pharmacokinetic effect. Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application.

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b). Effective January 1, 1994, a registered attorney or agent of

record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

PROVISIONAL OBVIOUSNESS-TYPE DOUBLE PATENTING

Claims 1, 2, 4, 11, 14, and 15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 10 and 11 of copending Application No. 11/035,627 and 10/653,677. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. However, it should be noted that application 10/653,677 has been presented for allowance. To avoid redundancy, the rejection will reference the senior application, 10/653,677.

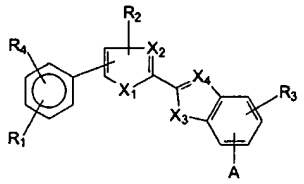
A rejection based on nonstatutory double patenting is based on a judicially created doctrine grounded in public policy so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re* Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re* Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re* Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re* Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re* Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969). See also M.P.E.P. § 804 (2001).

Obvious-type nonstatutory double patenting rejection is "analogous to [a failure to meet] the nonobviousness requirement of 35 U.S.C. §103" with the distinction that the double patent rejection is not considered prior art. Id. See also In re Braithwaite, 379 F.2d 594, 154 USPQ 29 (CCPA 1967). Thus, the analysis employed in an obviousness-type double patent rejection is

consistent with a §103(a) analysis set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966).

Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Instant Claim 1 recites a compound of Formula (I),



(I)

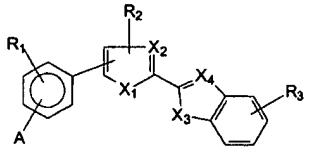
Wherein, *inter alia*: "**A**" is imidazole, "$\mathbf{X_1}$" is oxygen, "$\mathbf{X_2}$" is CH, "$\mathbf{X_3}$" is NH and "$\mathbf{X_4}$" is nitrogen. Variables $\mathbf{R_1}$, $\mathbf{R_2}$ and $\mathbf{R_3}$ and $\mathbf{R_4}$ are independently selected from the group consisting of H, alkyl, alkoxy, halide, alkylhalide, amidine, nitro and amino groups.

Instant Claim 2 recites the compound according to claim 1 wherein: "$\mathbf{X_1}$" is oxygen, "$\mathbf{X_2}$" is CH, "$\mathbf{X_3}$" is NH and "$\mathbf{X_4}$" is nitrogen and variables $\mathbf{R_2}$ and $\mathbf{R_3}$ and $\mathbf{R_4}$ are each hydrogen.

Instant Claim 4 recites the compound according to claim 1, wherein "**A**" is imidazole.

Instant Claim 11 recites the pharmaceutical composition of claim 1.

Instant Claim 14 recites a compound of Formula (I),



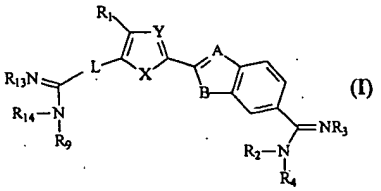
(II)

Wherein, *inter alia*: "**A**" is imidazole, "$\mathbf{X_1}$" is oxygen, "$\mathbf{X_2}$" is CH, "$\mathbf{X_3}$" is NH and "$\mathbf{X_4}$" is nitrogen. Variables $\mathbf{R_1}$, $\mathbf{R_2}$ and $\mathbf{R_3}$ and $\mathbf{R_4}$ are independently selected from the group consisting of H, alkyl, alkoxy, halide, alkylhalide, amidine, nitro and amino groups.

Instant Claim 15 recites a pharmaceutical composition according to claim 14.

Determining the Scope and Contents of the Co-pending Application

Conflicting Claims 1, 2, 10 and 11 of the co-pending application, 11/035,627 and 10/653,677 recite a compounds and compositions and a method of treatment of the compounds of Formula (I).



(I)

Claim 1 recites the compound of formula (I) wherein, *inter alia*, L is a phenyl ring; X is oxygen, A is CH, R2 and R9 are each hydrogen; and either R3 and R4 or R13 and R14 together represent a C2 alkyl (thereby forming a imidazole ring).

Claim 10 recites the pharmaceutical composition of formula (I) wherein, *inter alia*, L is a phenyl ring; X is oxygen, A is CH, R2 and R9 are each hydrogen; and either R3 and R4 or R13 and R14 together represent a C2 alkyl (thereby forming a imidazole ring).

Ascertaining the Differences Between the Copending Application and the Instant Claims

The difference between the instant claims and the copending application is that the claims in the copending applications (11/035,627 and 10/653,677) are species of the generic formula of the instant invention. Thus the difference is in scope of the claimed invention.

Resolving Level of Ordinary Skill in the Pertinent Art

The pertinent art is immunological drug discovery and generally medicinal chemistry. One of ordinary skill in the pertinent art of medicinal chemistry, specifically, immunological drug discovery would have the motivation to make and use to instant invention because there is motivation to make and use the instant compounds in the abovementioned co-pending application. The motivation to make claimed compound derives from the expectation that structurally similar compounds are generally expected to have similar properties and have similar utilities. In re Gyurik, 596 F. 2d 1012, 201 USPQ 552 (CCPA 1979).

Prima Facie Obviousness-The Rational and Motivation (MPEP §2142-2413)

The prima facie case for obviousness is derived from structural similarities. The teachings of the copending application would have motivated one skilled in the art to make and use in the instant compounds and compositions with the expectation that they would both have the same pharmacokinetic effect. Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application.

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b). Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

VI. OBJECTION(S)

Dependent Claim Objections

Dependent Claims 2, 4-7, 11-13, 15-17, 19-21, 23-25 are also objected to as being dependent upon a rejected based claim. To overcome this objection, Applicant should rewrite said claims in an independent form and include the limitations of the base claim and any intervening claim.

Claim Objection-Non Elected Subject Matter

Claims 1, 2, 4-6, 11-25 are objected to as containing non-elected subject matter. To overcome this objection, Applicant should rewrite the claims directed solely to the subject matter indicated as being examinable.

VII. ALLOWABLE SUBJECT MATTER

The allowable subject matter is the compound of Formula (I). The compounds of Formula II-IV would be allowable if the claims were amended around the art, for example if R3 is not hydrogen or methyl. It should be noted that adding a proviso will likely raise a new matter issue. Thus, the claims should be amended appropriately.

VIII. CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nyeemah Grazier whose telephone number is (571) 272-8781. The examiner can normally be reached on Monday through Thursday and every other Friday from 8:30 a.m. - 6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane, can be reached on (571) 272 - 0699. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Very truly yours,

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